

TWO WAY RADIO

USER'S MANUAL

To user

Thank you very much for your favor of our products!

This product is a multi-functional walkie-talkie. It combines the latest radio communication technology and strong mechanical framework, whether you are need to keep in touch with events team of professionals (such as pastoral areas, farms, drive, hunting, forest protection, tactical training) or just want to keep in touch with friends and family leisure users, this product will bring to your work, life, leisure convenience.

To avoid personal injury or property damage caused by improper operation, please read all information carefully before using our products. In order to ensure that you can enjoy the convenience brought by this product to the maximum, please read this manual and «Safety Information Manual» carefully before using.

Important Safety Information



Before using this walkie-talkie, please read carefully the following instructions for safe use of the walkie-talkie in radiofrequency radiation and Product Safety.

RF radiation information

This product is intended for professional applications that meet RF radiation requirements. Users must be aware of the hazards of RF radiation and take appropriate measures to meet the requirements of RF radiation limit.

Common sense in RF radiation

RF refers to the electromagnetic frequency that can be radiated into space. It is a technology widely used in the fields of communication, medical treatment and food processing. It will produce some RF radiation in the course of use.

Control and operating instructions of RF radiation

In order to maximize the performance of the product and to ensure compliance with the radiation limits in the relevant occupational or controlled environment of the above criteria, the sending time shall not exceed 50% of the rated factor and shall follow the instructions below:

- RF radiation is generated only during transmission (speech) rather than reception (listening) and standby.
- The distance between the terminal and the body during transmission should be at least 2.5 cm.

Prohibited to use

In the following places or situations, it is strictly prohibited to use this product, so as not to cause property damage or personal injury.

- Do not use this product or charge batteries in places where fuel, chemicals, explosive gases and other inflammable and explosive materials are stored.Any disassembly and installation is strictly prohibited.
- It is strictly prohibited to use this product in or near the blasting operation area.
- Do not use this product near medical equipment or electronic equipment sensitive to RF signals.
- When driving, the driver is strictly prohibited to hold this product to transmit signal.
- It is strictly prohibited to use this product in places where wireless communication equipment is prohibited.
- Please turn off the walkie-talkie before boarding.Any use of the walkie-talkie must be in accordance with airline policy or crew instructions.

User Safety Information

In the process of using this product, please observe the following precautions to avoid property loss or personal injury:

- Do not use unapproved or damaged parts.
- While the portable walkie-talkie is transmitting, keep the radio in a vertical position and keep the microphone about 5cm from the mouth.Keep the two-way radio at least 2.5cm from the head or body during transmitting.
- Do not use high decibel volume for long time.
- In automobile with airbags, do not place the two-way radio in the inflation area of the airbags.
- Do not place this product in the reach of children and pets.
- Please use the product within the specified operating temperature range.
- If it is transmitted for a long time, the fuselage will get hot. Please put the product to cool it down.
- Press the button with the same strength all the time, do not use too much force.
- The maintenance work of the walkie-talkie can only be carried out by professional technical personnel; assembly/disassembly without permission is prohibited.
- If you are wearing the portable walkie-talkie on your body, make sure that the antenna is at least 2.5cm away from the body when the walkie-talkie is transmitting.

Battery Safety Precautions

Forbidden to Recharge

Do not recharge in the following places or situations to avoid property damage or personal injury.

- 1.Do not recharge or replace batteries in places where fuel、chemicals、explosive gases and other inflammable and explosive materials are stored.
- 2.If the battery or terminal is contaminated with moisture, wipe it with a clean cloth before charging. Otherwise, it is forbidden to recharge.
- 3.Do not charge the battery when it leaks、deforms or overheats.
- 4.Do not use an unauthorized charger for charging.
- 5.Do not charge near strong radiation source.
- 6.Do not overcharge the battery; otherwise, the battery life will be affected.

Battery Maintenance

To ensure the normal operation of the battery and prolong its life, please observe the following precautions:

- 1.Dust accumulated on the positive and negative electrodes of the battery may affect normal charging. Therefore, clean the battery with a clean dry cloth in time.
- 2.It is recommended to charge the ambient temperature between 5℃ and 40℃; Charging at too high or too low a temperature can shorten battery life and even cause leakage.
- 3.If you want to charge a terminal equipped with a battery, it is recommended to turn off its power during charging to ensure that the battery is charged normally.
- 4.Do not plug or remove the power supply and battery during charging to avoid interfering with the normal charging process.
- 5.Do not discard the battery in the fire.
- 6.Do not expose the battery to direct sunlight for a long time or place it near other heat sources.
- 7.Do not squeeze、prick or remove the battery shell without authorization.

Transportation Information

1. Do not transport damaged or batteries.
2. Please make sure that the batteries in the packing case do not short-circuit. If there are multiple batteries in a packing case, pack each battery separately to avoid short-circuit.
3. If the walkie-talkie has a built-in battery, you must turn it off and take measures to prevent accidental startup. The transport documents shall state the details of the goods to be shipped and shall be marked with the battery transport label on the packing case. Please check with your carrier for local laws, regulations and other information.

Safety Precautions for Recycle

All of our products (including but not limited to walkie-talkies and batteries) have a life cycle of a certain number of years. At the end of the life cycle, it should not be treated as garbage recycling, but in accordance with the requirements of local laws and regulations.

Packing List

The packing box contains the following items. If any item is missing or damaged, please contact your dealer.

- | | |
|-------------------|-------------------------|
| ● 1 walkie-talkie | ● 1 Li-ion battery |
| ● 1 Adapter | ● 1 Intelligent charger |
| ● 1 User's Manual | ● 1 Antenna |
| ● 1 Belt Clip | ● 1 Handstrap |

Note: For the antenna frequency band, see the label on the color ring at the bottom of the antenna. If the frequency band is not specified, refer to the specific frequency band on the walkie-talkie.

Main Features

- Large screen, full keyboard, full open type menu operation.
- Voice prompt and screen display are combined to get rid of the bondage of writing frequency software.
- Large capacity and high energy battery for continuous battery life.
- This machine supports Type-c direct charging, convenient and quick battery life.
- UHF and VHF dual band, Dual standby, Dual watch, Dual display
- U-U/V-V/U-V three Operating Mode ,Up to 128 memory channels
- 50 sets of standard CTCSS and 104 sets of standard CDCSS
- High/Low Power are optional
- Frequency scan, Channel scan, CTC/DCS scan
- Three scan recovery modes: time, carrier and search
- Channel monitor, Dual band watch
- Voice Activated (VOX) Hands-free calls,VOX level 10 optional
- LED flashlight, sound and light alarm function, for your safety escort
- Repeaters activation TONE 1750HZ, 1450HZ, and 2100HZ are optional
- Time-out timer limit 30-180 seconds (TOT step value 30) is optional
- Digital tuning FM radio (receiving frequency 87-108MHz)
- Wide/Narrow Band Selection:25KHz/12.5KHz
- Automatic or manual keyboard lock is optional
- LCD backlight and key backlight function
- Low voltage indicator and alarm function
- 7.4V rechargeable lithium battery
- 2-pin Kenwood connector (earphone audio and programming connector)
- Lengthen high - sense antenna, better distance and sound quality

Preparation before use

Charging

Note: Be sure to ensure that the product is off when charging.

Please charge the battery with the charger specified by our company, The indicator light of the charger shows the charging status (see the form below).

1. Plug the power adapter into a power outlet;
 2. Plug the other end of the power adapter into the socket on the back of the charging cradle;
- The indicator light on the charging cradle shows the charging status. When the indicator light is red, it indicates the start of charging. When the indicator turns green, the charging is completed.
- The indicator shows the current charging status.


Red light	In charging
Green light	The charging is completed


Note:

- *For best battery performance, charge for a minimum of 6 hours on first charge.*
- *Please refer to the Battery Safety Precautions for necessary battery safety information.*

Battery level indicator

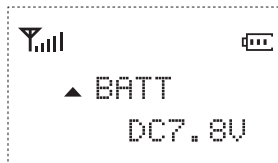
This feature lets you know the amount of battery remaining.

Icon	Battery level
	High
	Medium
	Low
	Insufficient

Note:  indicates that the battery is about to run out, and the outer frame of the icon flashes. In this case, the walkie-talkie is prohibited to launch.

You can press the [0 SQL] key to obtain battery voltage information. The screen displays BATT 7.8V (for example, 7.8V voltage).

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Accessory installation

Antenna installation/removal

Turn off the walkie-talkie, insert the antenna into the mounting hole and rotate it clockwise;

For antenna removal, rotate the antenna anticlockwise and remove it.

Note: *Do not shake the product with the top of the antenna, otherwise the performance and service life of the antenna will be reduced.*

Battery installation/removal

Before installation or removal the battery, be sure to turn the walkie-talkie completely off by turn the power/volume knob counterclockwise.

Battery installation:

- 1.Align the battery with the battery installing seat on the back of the two-way radio. Press the battery into the walkie-talkie forcefully;
- 2.Push the battery toward the top until the "battery latch" locks the battery.

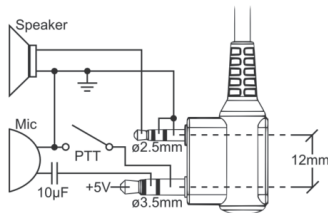
Battery removal:

- 1.Turn off the two-way radio before removing the battery. Move the battery lock to unlocking position and press it.
- 2.Then slide the battery downward until it is taken out of the battery installing seat.

Installation of external headphone/microphone

Open the headphone cover and insert the headphone plug into the headphone jack.

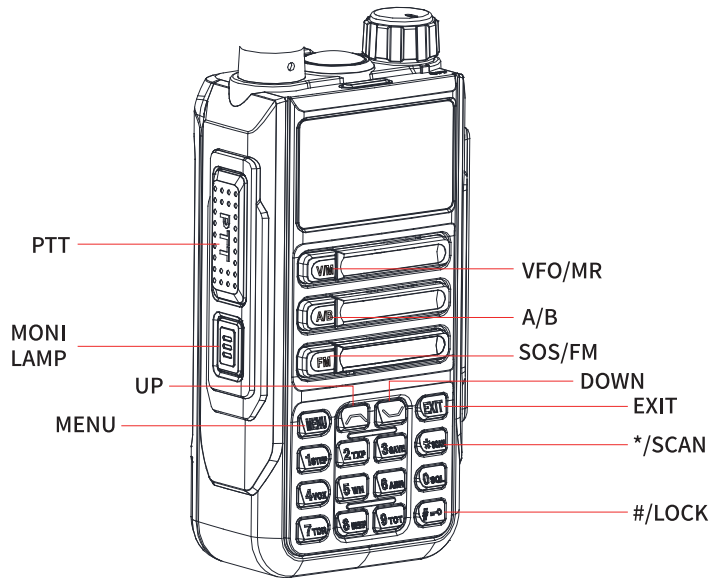
Note: Please install the attachment correctly, otherwise the external headphone or programming of walkie-talkie may be affected.



Familiar with this Product



Control keys and buttons



【PTT】 Transmit button	After press this key, the radio is in the transmitting status and speaks into the microphone to call the other party. After releasing this key, the radio is in the receiving status.
【Flashlight/MONI】 button	When short press this key,the walkie-talkie turn on the flashlight function;- Press twice to turn off the flashlight.Press again to turn off the flashlight.Press and hold for a long time to open the monitor function, and release this key to cancel the monitor.
【VFO/MR】 Frequency/ channel switch button	Press this key to switch between frequency mode and channel mode.Frequency mode is the basic mode of channel storage.
【A/B】 Frequency Band A (upper machine) and Frequency Band B (lower machine) switch button	Press this key to switch between Frequency Band A (upper machine) and Frequency Band B (lower machine).The frequency band indicated by the pointer is the transmitting frequency band.
【SOS/FM Radio】 button	Press the button to turn on the FM radio, and then press the button to turn off the FM radio(FM radio frequency can be searched automatically by press SCAN key or keyboard input); Long press to open the alarm function, and then press this button to cancel the alarm function.
【MENU】 button	Press it to activate the menu mode, enter the menu and press this button to select menu items.

【↶】 / 【↷】 UP/DOWN button	<p>In frequency mode, change the current frequency;</p> <p>In channel mode, switch channels up and down;</p> <p>In Menu status, change to set the menu items and menu values, press more than 2 seconds to quickly forward or backward search.</p> <p>In scanning status, Change the scanning direction.</p>
【EXIT】 button	<p>In the input status,clear the input information;</p> <p>In the FM mode,Switch 65-75/76-108mhz frequency.</p> <p>In scanning status, Change the scanning direction.</p>
* ,#, 0-9 number buttons	<p>0-9 are numeric keys used for input frequency, channel number, menu item and menu value, * key for channel, frequency, CTCSS/DCS and FM broadcasting station scanning, Long press the # key to lock or unlock the keyboard, Press [PTT] button to transmit, and then press the number button to transmit the corresponding DTMF number.</p>
【PTT】 + 【FM】	<p>TONE (1750HZ): Press [LAMP/FM] key to send 1750HZ signaling in transmitting state, release and exit.</p>

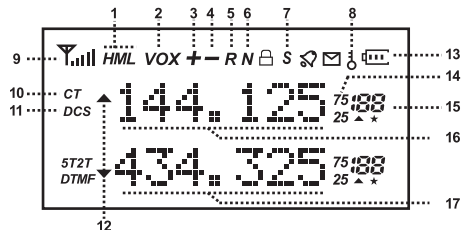
Numeric keypad

You can use these numeric keypads to enter messages or select channels on the intercom. Press and hold the PTT key in transmission mode, input the corresponding number to send the corresponding DTMF code.



A	B	C	D
1	2	3	*
4	5	6	0
7	8	9	#

- * SCAN** button: In standby mode, press to switch high, medium and low power; Long press to lock or unlock the keyboard.
- 0 SQL** button: In standby mode, Long press the button to display the current battery level.
- # PTT** button: In standby mode, Press to activate or disable the frequency reversal function; Long press to activate the scan function.



Description of LCD Icons

1. Transmission power icon(High/Low Power are optional)	10. The current CTCSS is enabled.
2. The VOX function is enabled.	11. The current DCS is enabled.
3. The frequency difference in a positive direction.	12. The current operating band indicator (A/B band indicator)
4. The frequency difference in a negative direction.	13. Battery level indicator
5. Frequency reversal (The reversal of receive and transmit frequencies)	14. The last two digits in the frequency decimal point.
6. Work in narrowband mode	15. In channel mode, the current channel number is displayed.
7. The dual watch function is enabled.	16. Frequency of current working segment A
8. The keyboard lock function is enabled.	17. Frequency of current working segment B
9. Field strength icon	

Basic Operation

Power on/off

To turn on the power, turn the 【Power Switch / Volume Control】 knob clockwise until you hear a "click" sound and a short beep sounds. To turn off the radio, turn the knob counterclockwise until you hear a click.

Adjusting Volume

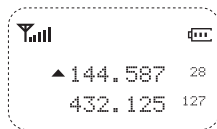
After turning on, turn the [Power switch / volume control] knob clockwise to increase the reception volume, and turn counterclockwise to reduce the reception volume.

Frequency mode and Channel mode selection

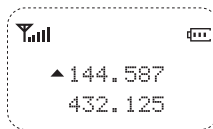
In standby mode, press [VFO/MR] to switch between frequency mode and channel mode.

In channel mode, the channel number (for example, 28) is displayed on the right;

In frequency mode, the channel number on the right disappears.



Channel mode(MR)



Frequency mode(VFO)

Channel selection

In channel mode, press \wedge or \vee to select a channel up or down. Long press \wedge or \vee to quickly switch channels down or up. When the voice prompt function is enabled, the voice broadcasts the corresponding channel.

Note: In channel mode, input the channel number directly through the numeric keypad, you can quickly select the channel you are familiar with.

Call

To ensure the best receive volume, the distance between the microphone and the mouth should be 2.5cm to 5cm.

○Making a call: after selecting a channel, press and hold down the [PTT] key, the walkie-talkie is in transmitting state, the red light should be on. Then speak into the microphone in a normal voice.

○Call reception: Release the [PTT] button, and the end of transmission prompt tone will be played. The walkie-talkie is in receiving state. When receiving a call, the green indicator is steady on.

Note: *In frequency mode, input the working frequency within the allowed range through the numeric keypad, press and hold down the [PTT] key, the walkie-talkie is in the transmitting state, and the red indicator is always on. Then speak into the microphone in a normal voice.*

Before initiating a call, you can temporarily switch the power of the walkie-talkie by pressing the 【#/PTT】 key. “H” or “L” above the display indicates high power or low power transmission.

Monitor function

In standby mode, long press [LAMP/MONI] key to open the monitor function. Release the [LAMP/MONI] key to exit the monitor state.

Flashlight function

Turn on the walkie-talkie, short press [LAMP/MONI] key, turn on the flashlight function; Press the [LAMP/MONI] key again and the LAMP flashes; Press [LAMP/MONI] again to turn off the flashlight function.

Keyboard lock

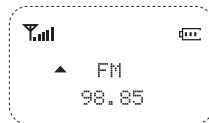
When the keyboard is not locked, long press the 【#/PTT】 key to lock the keyboard, and the  icon will be displayed in the first line of the screen.

In the key lock state, long press the 【#/PTT】 key to release the lock state.

FM radio function

Turn on the walkie-talkie and press the 【FM/SOS】 key to enter the FM radio mode. The screen display is as shown in the picture:

Press \wedge or \vee to search for FM radio channels by preset step frequency, or press 【*/SCAN】 to automatic search FM radio channels. Press the 【FM/SOS】 key to exit the FM radio mode.



Audible and visual alarm function

Turn on the walkie-talkie and long press 【FM/SOS】 key to activate the audible and visual alarm function. The alarm light flashes and the loudspeaker gives out the alarm sound.

Note: Alert mode can be set through menu 32. There are three modes for you to set: TONE, CODE and SITE.

Repeater activated audio

The walkie-talkie operates in repeater mode and can activate the dormant repeater by transmitting repeater activation audio even when the channel is locked.

Turn on the walkie-talkie, press the [PTT] key, and then press the [FM/SOS] key to transmit 1750Hz audio.

Note: The repeater activated audio can be set Menu No.41. This machine has 1000hz and 1450hz and 1750hz and 2100hz a total of 4 kinds of audio for your choice.

Frequency reversal function

In standby mode, press the [*/SCAN] key to reverse the receive frequency and transmit frequency, and "R" is displayed at the top of the screen. This feature is often used for repeater channels.

Advanced function operations

Channel Scan

In channel mode, long press the [*/SCAN] key to enter the channel scan mode. The walkie-talkie scans between the channels. When an active channel is detected, it will stay in the active channel until it is idle. The channel is idle for 5 seconds before resuming scanning.

Press the [PTT] key to initiate a callback while staying on an active channel.

Press the [*/SCAN] key to exit the SCAN.

Note: The scan recovery mode can be set through Menu 18. There are three recovery modes for you to set: time, carrier and search.

Frequency Scan

In frequency mode, long press the [*/SCAN] key to enter the frequency scan mode. When an active frequency point is detected, it will automatically stay at this active frequency point until it is idle. After this frequency point is idle for 5 seconds, the scan is resumed.

Press the [PTT] key to initiate a callback while staying on an active frequency.

Press the [*/SCAN] key to exit the SCAN.

CTCSS/CDCSS Scan

In frequency mode, use Menu 7 (TDR) to disable the dual watch function. Before performing scanning, set the receiving frequency to ensure that signals can be received at this frequency.

(1) R-CTCS

A. In frequency mode, Press the number key to enter the correct received frequency;

B. Press the [MENU] key to enter MENU function;

C. Press the number key [1][1] successively to enter menu 11 (CTCSS);

· Or press the  or  to go forward or backward to menu 11;

D.Press the [MENU] key to start CTCSS scan, you must ensure that CTCSS is enabled and not turned OFF (not set to OFF).

E.Press the [EXIT] key to exit the CTCSS Scan.

(2)R- DCS

A.In frequency mode,Press the number key to enter the correct received frequency;

B.Press the [MENU] key to enter MENU function;

C.Press the number key [1][0] successively to enter menu 11(DCS);

•Or press the \wedge or \vee to go forward or backward to menu 10;

D.Press the [MENU] key to start DCS scan, you must ensure that DCS is enabled and not turned OFF (not set to OFF).

E. Press the [EXIT] key to exit the DCS Scan.

VOX

When the VOX function is enabled, you do not to press the PTT button to transmit. The VOX will be automatically transmitted through the voice of normal speech, and the VOX will automatically stop transmitting after the speech stops and wait for receiving.In some workplaces, If the user cannot make a call by pressing the [PTT] key, the function can be enabled. Operation method:

A.Press the [MENU] key to enter MENU function;

B.Press the number key [4] successively to enter menu 4(VOX);

•Or press the \wedge or \vee to go forward or backward to menu 4

C.Press [MENU] key to enter the setting of VOX level, press the \wedge or \vee key to select 1-10 (If select of higher the numeric value, the higher the sensitivity of VOX.)

D.Press the [MENU] key to save and return to the previous menu.

•Repeat the previous steps and select OFF to disable the VOX function.

Keyboard lock

The keyboard lock function disables keyboard to prevent you from activating a function incorrectly. This machine can be set to automatic keyboard lock function, the operation is as follows:

A. Press the [MENU] key to enter MENU function;

B. Press the number key [2][4] successively to enter menu 24(AUTOLK);

· Or press the \curvearrowright or \curvearrowleft to go forward or backward to menu 24.

C. Press the [MENU] key to enter the setting of automatic keyboard lock function, press the \curvearrowright or \curvearrowleft key to select ON, The machine automatic keyboard lock function is enabled.

D. Press the [MENU] key to save and return to the previous menu.

· Repeat the previous steps and select OFF to disable the automatic keyboard lock function.

You can choose to manually lock the keyboard. The operation is as follows:

① In standby mode, long press the [# \blacksquare \bigcirc] key for more than 2s to enable the keyboard lock function (voice prompt "lock");

② Repeat the previous steps to disable the keyboard lock function (voice prompt "unlock").

Note: After the automatic keyboard lock function is turned on, the radio will automatically lock the keyboard without any keyboard operation for 10 seconds.

Dual Standby

When in dual standby mode, the radio can receive the A or B channel. The operation is as follows:

A. Press the [MENU] key to enter MENU function;

B. Press the number key [7] to enter menu 7(TDR);

· Or press the \curvearrowright or \curvearrowleft to go forward or backward to menu 7.

C. Press the [MENU] key to enter the setting of dual standby function, press the \curvearrowright or \curvearrowleft key to select ON;

D. Press the [MENU] key to save and return to the previous menu. The machine dual standby function is enabled. The icon S is displayed in the first row of the screen.

· Repeat the previous steps and select OFF to disable the dual standby function, The icon S disappears in the first line of the screen.

How to lock dual standby transmission channels?

- A.Press the [MENU] key to enter MENU function;
- B.Press the number key [3][4] successively to enter menu 34(TDR-AB);
- C.Press the [MENU] key to select;
- D.Press the \wedge or \vee to select A or B.
- E.Press the [MENU] to confirm.
- F.Press the [EXIT] to exit the menu function.

If you want to temporarily unlock without having to set menu 34 (TDR-AB) option to OFF, you can toggle by pressing the [A/B] keys before pressing PTT.

Channel Deleted

- A.Press the [MENU] key to enter MENU function;
- B.Press the number key [2][8] successively to enter menu 28(DEI-CH);
 - Or press the \wedge or \vee to go forward or backward to menu 27.
- C.Press the [MENU] key to enter channel deletion operation; Press the \wedge or \vee to select the channel to delete forward or backward.
 - If the prefix of the number is "CH-", it indicates that the channel number already contains channel parameters and can be deleted.
 - If the prefix of the number does not contain "CH-", the channel number is empty and can be stored directly.
- D.Press the [MENU] key to confirm the deletion of existing channel parameters, save and return to the previous menu.
 - If the channel is empty, press the [MENU] key to directly return to the previous menu.

Manual programming

The parameters of a complete channel include receive frequency, transmit frequency, R-CTCS, T-CTCS, transmit power, channel bandwidth, PTT-ID, busy lock, signal code, scan add, channel name, etc. All parameters can be set in frequency mode, except for scan add and channel name which need to be edited by writing frequency software, and then stored in the specified channel number through menu 27 save channel.

Frequency mode and Channel mode

The Frequency mode is also called VFO mode; The Channel mode is also called MR mode.

In standby mode, press the [V/M] key to switch between frequency mode and channel mode. The frequency mode is the basic mode of frequency editing.

Example 1. The edit a relay channel with CTCSS.

The example create a new storage channel on channel 10.

Receive frequency: 432.55000, transmit frequency 437.55000 (frequency difference frequency is + 5.0mhz), T-CTCSS is 123.0.

The operation steps are as follows:

1>Press the [V/M] key to switch to frequency mode. The serial number of the right channel disappears.

2>Press the keyboard key [MENU][2][8][MENU][1][0][MENU][EXIT] successively to delete the existing data on Channel 10.

3>Press the keyboard key [[MENU][1][3][MENU][1][2][3][MENU][EXIT] successively to select T-CTCSS.(CTCSS: 123.0)

4>The manually input the receiving frequency on the keyboard. (example 432.55000)

5>Press the keyboard key [MENU][2][7][MENU][1][0][MENU] successively to enter the storage channel.(example channel 10)

6>Press the [EXIT] key to return.

7>The manually input the transmitting frequency on the keyboard. (example 437.55000)

8>Press the keyboard key [MENU][2][7][MENU][1][0][MENU] successively to enter the storage channel.(exam

ple channel 10)

9>Press the [EXIT] key to return.

10>Press the [V/M] key to switch to the channel mode, and the channel number on the right reappears.

Example 2. The edit a simplex channel with CTCSS (same receiving and transmitting frequency)

The example create a new storage channel on channel 10.

Receiving and transmitting frequency: 432.66250 (TX and RX is same frequency), T-CTCSS is 123.0

The operation steps are as follows:

1>Press the [V/M] key to switch to frequency mode. The serial number of the right channel disappears.

2>Press the keyboard key [MENU][2][8][MENU][1][0][MENU][EXIT] successively to delete the existing data on Channel 10.

3>Press the keyboard key [[MENU][1][3][MENU][1][2][3][MENU][EXIT] successively to select T-CTCSS.(CTCSS: 123.0)

4>Press the [A/B] key to select the AB pointer to A.

5>The manually input the transmitting frequency on the keyboard. (example 432.66250)

6>Press the keyboard key [MENU][2][7][MENU][1][0][MENU] successively to enter the storage channel.(example channel 10)

7>Press the [EXIT] key to return.

8>Press the [V/M] key to switch to the channel mode, and the channel number on the right reappears.

Repeater Frequency Programme

The following instructions assume that you know the transmitting and receiving frequencies used by the repeater and that you have the right to use them.

- 1>Press the [V/M] key to switch to frequency mode. The serial number of the right channel disappears.
- 2>Press the keyboard to enter the transmit/receive frequency of the repeater.
- 3>Press the [MENU] key to enter MENU function;
- 4>Press the number key [2][6] successively to enter menu 26(OFFSET);Then press the [MENU] key to access the function and use the keypad to enter the specified frequency difference frequency.
- 5>Press the [MENU] to confirm and save.
- 6>Press the number key [2][5] successively to enter menu 25(SFT-D),Press the \wedge or \vee key to select + (positive) or - (negative) frequency difference.
- 7>Press the [MENU] to confirm and save.
- 8>Press the [EXIT] key to return.

If all goes well, you should be able to make test calls through the repeater.

Function Menu

Basic use of menus

Use menu functions through arrow keys

1>Press the [MENU] key to enter MENU function;

2>Press the \curvearrowright or \curvearrowleft key to select between manu items.

3>After finding the desired MENU item, press the [MENU] to select the MENU item.

4>Press the \curvearrowright or \curvearrowleft key to select the parameters.

5>The parameters to set for the given menu item are selected;

a) To confirm selection, press the [MENU], which will save your Settings and return to the main MENU.

b) To cancel the changes, press the [EXIT], which will reset the menu item and remove you from the menu completely.

6>To exit the menu at any time, press the [EXIT] key.

Quick operation of menus

You may have noticed that in the menu list, each menu item has a menu number associated with it. These numbers can be used to directly access any set menu item.

1>Press the [MENU] key to enter MENU function;

2>Please enter the number of the menu item on the numeric keypad

3>Press the [MENU] key to enter the MENU item







4>Press the \curvearrowright or \curvearrowleft key to select the parameters.


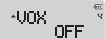

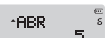
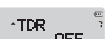

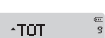
5>The parameters to set for the given menu item are selected;

a) To confirm selection, press the [MENU], which will save your Settings and return to the main MENU.

b) To cancel the changes, press the [EXIT], which will reset the menu item and remove you from the menu completely.

6>To exit the menu at any time, press the [EXIT] key.

Menu number	Name of the function	Menu Set (In standby mode)	LCD display	Level 2 menu displays characters(optional)	Description of settings
0	Squelch	 0 SQL		0,...,9	Squelch level, the lower the level is easy to interfere; the higher the level of sensitivity is worse, it is best to set the middle.
1	Step Frequency	 1 STEP		2.5K	In frequency mode, when the UP and DOWN keys are pressed, the step value of frequency is changed.
				5.0K	
				6.25K	
				10.0K	
				12.5K	
				20.0K	
				25.0K	
				50.0K	
2	Transmits Power	 2 TXP		HIGH	The radio transmits at high power.
				LOW	The radio transmits at low power.

3	Power Save	MENU → 3 SAVE		OFF	Turn off the power saving mode.
				1	The save power in 1:1 mode.
				2	The save power in 1:2 mode.
				3	The save power in 1:3 mode.
				4	The save power in 1:4 mode.
4	Vox Level	MENU → 4 VOX		OFF	Turn off the VOX function.
				1,2,... 10	VOX Level
5	Channel Bandwidth	MENU → 5 WN		WIDE	The radio work in wideband mode
				NARR	The radio work in narrowband mode.
6	Backlight	MENU → 6 ABR		OFF	The background light is turned off.
				1,2,3...8, 9, 10	Turn off the backlight automatically when the time is up.
7	Dual Standby	MENU → 7 TDR		OFF	Turn off the dual standby mode
				ON	Turn on the dual standby mode
8	Beep Prompt	MENU → 8 BEEP		OFF	Turn off the beep prompt
				ON	Turn on the beep prompt
9	Time-out timer	MENU → 9 TOT		15,30...600	The number goes from 15 to 600. In 15 steps, Indicates the maximum transmit time by pressing the PTT key.

10	Rx-DCS	MENU → 1 STEP 0 SQL	-R-DCS OFF	OFF	DCS is not set
				D023N...D754I	Standard sequence of DCS.
11	Rx-CTCSS	MENU → 1 STEP 1 STEP	-R-CTCS OFF	OFF	The save power in 1:2 mode.
				67.0HZ...254.1HZ	Standard sequence of CTCSS. In Menu Mode, It can be typed directly from the keyboard (standard or non-standard).
12	Tx-DCS	MENU → 1 STEP 2 TXP	-T-DCS OFF	OFF	DCS is not set
				D023N...D754I	Standard sequence of DCS
13	Tx-CTCSS	MENU → 1 STEP 3 SAVE	-T-CTCS OFF	OFF	CTCSS is not set
				67.0HZ...254.1HZ	Standard sequence of CTCSS. In Menu Mode, It can be typed directly from the keyboard (standard or non-standard).
14	VOICE	MENU → 1 STEP 4 VOX	-VOICE OFF	OFF	Turn off the voice prompt
				CHI	The Chinese prompt language is enabled.
				ENG	The English prompt language is enabled.
15	ANI (Automatic Number Identification)	MENU → 1 STEP 5 WIN	-ANI-ID 00000		Only could be set by PC software






16	DTMF	MENU → 1 STEP 6 ABR	DTMFST DM+ANI	OFF	When manually or automatically codeword is sent, the unit does not make sound.
				DT-ST	When codeword is manually sent, the unit makes the sound.
				ANI-ST	When codeword is automatically sent, the unit makes the sound.
				DT+ANI	When manually or automatically codeword is sent, the unit makes the sound.
17	Signal Code	MENU → 1 STEP 7 TDR	S-CODE 1	1,...,15	Signal code(only could be set by PC software)
18	Scan Mode	MENU → 1 STEP 8 BEEP	SC-REV TO	TO	Time-based scan: indicates that the scanning is resumed 5 seconds after the signal is detected.
				CO	Carrier scan: the scanning mode stops after the signal is found and continues after the signal disappears.
				SE	Search scan: Stops scanning after a signal is found..
19	Dual Standby	MENU → 1 STEP 9 TOT	PTT-ID OFF	OFF	Do not send code when PTT is pressed
				BOT	Press PTT to send code; (only could be set by PC software)
				EOT	Release PTT to send code
				BOTH	Send code when it is pressed or released the PTT.
20	PTT-LT	MENU → 2 TXP 0 SOL	PTT-LT 5	0,1,...,50	Delay time before automatic sending code (Unit: MS)

21	MDF-A	MENU → 2 TXP 1 STEP	MDF-A FREQ	FREQ	In channel mode, the A channel is display channel frequency.
				CH	In channel mode, the A channel is display channel numbers.
				NAME	In channel mode, the A channel is display channel name. (only could be set by PC software)
22	MDF-B	MENU → 2 TXP 2 TXP	MDF-B FREQ	FREQ	In channel mode, the B channel is display channel frequency.
				CH	In channel mode, the B channel is display channel numbers.
				NAME	In channel mode, the B channel is display channel name. (only could be set by PC software)
23	Busy Lockout	MENU → 2 TXP 3 SAVE	BCL OFF	OFF	Transmit when the channel is occupied
				ON	The channel is occupied and transmission is prohibited
24	Automatic keylock	MENU → 2 TXP 4 VOX	AUTOLK OFF	OFF	Turn off the automatic keyboard lock
				ON	Turn on the automatic keyboard lock
25	Direction	MENU → 2 TXP 5 WN	SFT-D OFF	OFF	In frequency mode, there is no frequency difference between transmitting frequency and receiving frequency.

				+	In frequency mode, the transmitting frequency is equal to the receiving frequency plus the frequency difference.
				-	In frequency mode, the transmitting frequency is equal to the receiving frequency minus the frequency.
26	Offset	MENU → 2 TXP 6 ABR	·OFFSET 00.000	00.000...69.990	In frequency mode, the difference between the transmitted and received frequencies.
27	Channel storage	MENU → 2 TXP 7 TOR	·MEM-CH 000	000...127	When save a channel, indicates the channel number to be saved. If a number is preceded by "CH-", the channel already has channel parameters.
28	Channel delete	MENU → 2 TXP 8 BEEP	·DEL-CH 000	000...127	Deletes channel parameters for the specified channel, If no "CH-" indicates that the channel has no parameters, the operation is invalid.
29	Backlight selection in standby mode	MENU → 2 TXP 9 TOT	·WT-LED BLUE	OFF	Turn off the backlight
				BLUE	Turn on the blue backlight in standby mode
				ORANGE	Turn on the orange backlight in standby mode
				PURPLE	Turn on the purple backlight in standby mode

30	Receive a backlight	MENU → 3 SAVE 0 SQL	RX-LED ORANGE	OFF	Turn off the backlight
				BLUE	Turn on the blue backlight in receive state
				ORANGE	Turn on the orange backlight in receive state
				PURPLE	Turn on the purple backlight in receive state
31	Transmit a backlight	MENU → 3 SAVE 1 STEP	TX-LED PURPLE	OFF	Turn off the backlight
				BLUE	Turn on the blue backlight in transmit state
				ORANGE	Turn on the orange backlight in transmit state
				PURPLE	Turn on the purple backlight in transmit state
32	Alarm Mode	MENU → 3 SAVE 2 TXP	AL-MOD SITE	SITE	On site
				TONE	Send alarm tone
				CODE	Send alarm code
33	Frequency band selection	MENU → 3 SAVE 3 SAVE	BAND UHF	VHF	Set the working frequency band to 136-174 MHZ
				UHF	Set the working frequency band to 400-520 MHZ

34	Dual watch to transmit selection	MENU → 3 SAVE 4 VOX	TDR-AB A	A	In dual watch state, press PTT key to select A segment for transmitting and receiving
				B	In dual watch state, press PTT key to select B segment for transmitting and receiving
35	Tail Tone Elimination	MENU → 3 SAVE 5 WN	STE ON	OFF	After releases the PTT, the radio will not send the code. Usually, when passing through the repeater, the radio will make noise to confirm whether the signal of the radio is transferred.
				ON	When the PTT is released, the radio sends the code, and the receiver makes an instantaneous noise.
36	Repeater tail tone elimination	MENU → 3 SAVE 6 ABR	RP-STE OFF	OFF	When passing through the repeater to retransmitting, after the transmitter releases the PTT key, the radio enters receiving status. Due to the delay of repeater, the instant signal transmitted by the repeater can be received. The value of the menu item shall be adjusted to ensure that no noise of this radio is generated when transmitting across the repeater, so as to confirm whether the relay is operating. The menu item shall be set OFF.
				1,2,3...8,9,10	

37	Delay time of repeater	MENU → 3 SAVE 7 TDR		OFF	<p>When the signal is transmitted across the repeater and retransmitted by it, in order to confirm whether the repeater has retransmitted the signal for this radio, the delay time of the repeater stopping transmitting shall be utilized to confirm that the signal has been retransmitted. The menu item is used to adjust the time of the noise. If the noise isn't needed, please set it as OFF.</p>
				1,2,3...8,9,10	
38	Power On display	MENU → 3 SAVE 8 BEEP		FULL	The screen display character.
				MGS	The screen display model.
39	Call end prompt tone	MENU → 3 SAVE 9 TOT		ON	The release the PTT key to send an end prompt tone.
				OFF	The release of the PTT key doesn't send an end prompt tone.
40	Reset	MENU → 4 VOX 0 SOL		VFO	Initialize of Menu
				ALL	Initialize of Menu and channel
41	Repeater activates tone	MENU → 4 VOX		1000Hz/1450Hz /1750Hz/2100Hz	<p>*To transmit relay activated tone, press the [PTT] key, and then press the [FM/SOS] key.</p>

Troubleshooting Guide

Malfunction	Solution
The radio has no power supply, and can not start.	The battery may run out. Please charge or change to a new battery. The battery may not be properly installed. Please remove the battery and reinstall it.
The battery power does not last long after charging.	The battery has reached the end of its life, please renew it.(About 300 cycles of charge and discharge)
The radio cannot talk to other members of the group.	Make sure you use the same frequency and CTCSS/DCS as other members of your group. You may be too far away from the rest of the group. Please make sure that you are within the range of other walkie-talkies.
The communication distance is too close.	Make sure that the antenna is in good contact.Please confirm whether the antenna is original.Please confirm whether the battery voltage is normal.
Other (non-member) voices are heard on the channel.	Please change the CTCSS/DCS.In this case, it is important to change the CTCSS/DCS of all the walkie-talkies in the group.
The radio communication is noisy.	1.The current communication distance with other members is too far, please approach to valid communication range. 2.If it is not in a good position, such as blocked by a tall building, or in the basement, etc., it is transferred to an open and flat area. Close and open the radio and try again. 3.Due to external environment or electromagnetic interference, avoid devices that may cause interference.

▲ As above method still cannot solve your problem, or you meet other problem, please get contact with local distributor to get the technological support.

TECHNICAL SPECIFICATION

General Specification

Memory Channel	128 Group
Channel Spacing	25KHz(Wide)、 12.5K (Narrow)
Operating Voltage	DC 7.4V(Rechargeable lithium battery)
Frequency Stability	±2.5ppm
Operating Temperature	− 20~ + 60 C
Antenna Impedance	50Ω
Transmit Current	≤2.2A
Modulation (Wide/Narrow)	16KΦF3E / 11KΦF3E
Stray Power	≤7.5uW
Adjacent Channel power	≤-65 dB/≤-60 dB
Signal-to-noise(wide/narrow)	≥-45dB /≥-40dB
Modulation Sensitivity	8-12mV
Demission	62(W)*120(H)*37(D)mm *Not including antenna*
Weight	About 252G (including antenna and battery)

Receiver part

Receiver Sensitivity	≤0.25uV (12dB SINAD)
Audio Power	1W@10%
Audio Distortion	< 10%
Signal-to-Noise	≥45dB
Adjacent Channel Selectivity (Wide/Narrow)	≥65 dB /≥60 dB
Intermodulation (Wide/Narrow)	≥65 dB /≥60 dB
Receiver Current	≤380mA



All specifications may be modified without prior notice or liability

Maintenance and Clean

To keep the performance and extend the service life, please note the content below for maintain the clear the radio.

Maintenance

- 1.Do not puncture or scratch this product with hard objects.
- 2.Do not store the radio in an environment containing a corrosive electronic circuit material.
- 3.Do not directly lift an antenna or an external microphone in the course of carrying or using a radio.
- 4.Cover the appendage interface cover, when attachments are not used.

Clean

Note:Please turn off the radio and remove the battery before clearing.

- 1>Please use clean, dry cloth or brush to wipe off the surface of the radio and the dust attached to the charging pole on a regular basis.
- 2>After long term use of radio, walkie-talkie buttons, control knobs and chassis are easy to dirty. You can use neutral detergent (do not use strong corrosive chemicals) and wet cloth to clean.
- 3>After cleaning, make sure the radio is completely dry; otherwise please do not use it.

Disclaimer

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WARRANTY CERTIFICATE

Brand:

Model no:

Serial no:

Name of purchaser:

Address:

City:

Zip code:

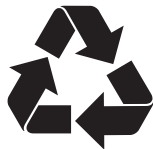
Province/State:

Tel no:

Date of purchase:

Seal and name of the dealer:

WARNING: Warranty is valid provided it is complete and properly filled in legibly and clearly present the seal and name of the dealer and have attached the bill proof of purchase of equipment.



RECYCLED PACKAGING